

1 1. A housing assembly comprising:

2 a housing having an access opening;

3 a cover movable between a closed position wherein said cover generally covers said  
4 access opening and an open position wherein said cover generally does not cover said access  
5 opening;

6 a protrusion located on one of said housing or said cover; and

7 a track located on the other one of said housing or said cover, said protrusion being  
8 slidably received in said track, and wherein said track forms a generally closed loop shape  
9 such that said protrusion slides in said track when said cover is moved between said open and  
10 said closed positions.

1 2. The assembly of claim 1 wherein said track includes a first rest location and a second  
2 rest location, each rest location being a relatively low or a relatively high location such that  
3 any immediately adjacent portions of said track extend generally upwardly or generally  
4 downwardly away from the associated rest location, and wherein said protrusion is located in  
5 said first rest location when said cover is in said closed position and wherein said protrusion  
6 is located in said second rest location when said cover is in said open position.

1 3. The assembly of claim 2 wherein said second rest location is located above said first  
2 rest location.

1 4. The assembly of claim 2 wherein said track further comprises a portion of said track  
2 extending from said second rest location to said first rest location having a first ramp having a  
3 first defining lip with said first defining lip being adjacent to said first rest location and a  
4 portion of said track extending from said first rest location to said second rest location having  
5 a second ramp having a second defining lip with said second defining lip being adjacent said  
6 second rest location wherein said first and second ramps provide user feedback as said  
7 protrusion traverses said first and second ramps when closing and opening said cover and  
8 said first and second defining lips inhibit reverse motion of said protrusion in said track.

1 5. The assembly of claim 4 wherein at least one of said first and second ramps has a  
2 ribbed surface to provide user feedback.

1 6. The assembly of claim 3 wherein said track includes a first portion extending from  
2 said first rest location to a first intermediate location and a second portion extending from  
3 said first intermediate location to said second rest location, and wherein said first portion  
4 generally forms an angle with said second portion at said first intermediate location.

1 7. The assembly of claim 6 wherein said first intermediate location is located generally  
2 above said first rest location.

1 8. The assembly of claim 6 wherein said track further includes a third portion extending  
2 from said second rest location to a second intermediate location and wherein said third  
3 portion generally forms an angle with said second portion at said second rest location.

1 9. The assembly of claim 8 wherein at least one of said first portion and said third  
2 portion further comprises a ramp having a defining lip wherein said ramp provides user  
3 feedback as said protrusion traverses said ramp when closing and opening said cover and said  
4 defining lip inhibits reverse motion of said protrusion in said track.

1 10. The assembly of claim 9 wherein said ramp has a ribbed surface to provide user  
2 feedback.

1 11. The assembly of claim 8 wherein said track further includes a fourth portion  
2 extending from second intermediate location to an intersection location wherein said fourth  
3 portion intersects said first portion, and wherein said fourth portion generally forms an angle  
4 with said third portion at said second intermediate location.

1 12. The assembly of claim 11 wherein said second intermediate location is located  
2 generally above said second rest location.

1 13. The assembly of claim 11 wherein said intersection location is located generally at or  
2 adjacent to said first rest portion.

1 14. The assembly of claim 1.1 wherein said intersection location is located generally  
2 above said first rest location.

1 15. The assembly of claim 1 wherein movement of said cover from said closed position to  
2 said open position, and returning said cover to said closed position, causes said protrusion to  
3 slide in said track in a generally closed loop path.

1 16. The assembly of claim 1 wherein said cover is pivotally coupled to said housing.

1 17. The assembly of claim 1 further including an arm pivotally mounted to said one of  
2 said cover or said housing, and wherein said protrusion is located on said arm.

1 18. The assembly of claim 1 wherein said track includes means to allow movement of  
2 said protrusion in a first direction and to generally block movement of said protrusion in a  
3 second direction.

1 19. The assembly of claim 1 wherein said housing is a housing of at least one of a printer,  
2 copier, facsimile machine or scanner.

1 20. The assembly of claim 1 wherein said assembly further comprises:

2 a support tab located adjacent to said track;

3 an arm pivotally mounted to said one of said cover or said housing wherein said  
4 protrusion is located on said arm; and

5 a supplemental arm that coupled to one of said cover or said housing, said  
6 supplemental arm being supported by said support tab when said cover is in said open  
7 position to thereby support said cover when said cover is in said open position.

1 21. A business machine comprising:

2 a housing having an access opening;

3 a cover pivotally coupled to said housing and being pivotable between a stable closed  
4 position wherein said cover generally covers said access opening and a stable open position  
5 wherein said cover generally does not cover said access opening, wherein said cover is  
6 generally stably retained in said stable open and closed positions, and wherein said cover can  
7 be moved from said stable closed position to said stable open position by raising said cover  
8 and lowering said cover into said stable closed position, and wherein said cover can be  
9 moved from said stable open position to said stable closed position by raising said cover and  
10 lowering said cover into said stable closed position.

1 22. The business machine of claim 21 wherein said business machine is at least one of a  
2 printer, copier, facsimile machine or scanner.

1 23. A housing assembly comprising:

2 a housing having an access opening;

a cover pivotably coupled to said housing and movable between a closed position wherein said cover generally covers said access opening and an open position wherein said cover generally does not cover said access opening;

a protrusion located on one of said housing or said cover; and

a track located on the other one of said housing or said cover, said protrusion being slidably received in said track, and wherein said track forms a generally closed loop shape such that said protrusion slides in said track when said cover is moved between said open and said closed positions, said track comprising:

a first rest location and a second rest location with said second rest location being generally above said first rest location, each rest location being a relatively low or a relatively high location such that any immediately adjacent portions of said track extend generally upwardly or generally downwardly away from the associated rest location, and wherein said protrusion is located in said first rest location when said cover is in said closed position and wherein said protrusion is located in said second rest location when said cover is in said open position; and

a first, second, third and fourth portions, said first portion extending from said first rest location to a first intermediate location generally above said first rest location, said second portion extending from said first intermediate location to said second rest location generally below said first intermediate location wherein said first portion generally forms an angle with said second portion at said first intermediate location, said third portion extending from said second rest location to a second intermediate location generally above said second rest location wherein said third portion generally forms an angle with said second portion at said second rest location, and said fourth portion extending from second intermediate location to an intersection location with said first portion wherein said fourth portion generally forms an angle with said third portion at said second intermediate location, said fourth portion generally forms an angle with said first portion at said intersection location and said intersection location is generally above said first rest location.

24. The assembly of claim 23 wherein said track further comprises said first portion having a first ramp having a first defining lip adjacent to said first intermediate location, said second portion having a second ramp having a second defining lip adjacent said second rest location, said third portion having a third ramp having a third defining lip adjacent said second intermediate location, said fourth portion having a fourth ramp having a fourth defining lip adjacent said intersection location wherein said first, second, third and fourth

7 ramps provide user feedback as said protrusion traverses said ramps when closing and  
8 opening said cover and said first, second, third and fourth defining lips inhibit reverse motion  
9 of said protrusion in said track.

1 25. The assembly of claim 24 wherein at least of said ramps has a ridged surface to  
2 provide user feedback.

1 26. The assembly of claim 23 wherein at least one of said first, second, third and fourth  
2 portions further comprises having a ramp having a defining lip wherein said ramp provides  
3 user feedback as said protrusion traverses said ramp when closing and opening said cover and  
4 said defining lip inhibits reverse motion of said protrusion in said track.

1 27. The assembly of claim 26 wherein said ramp has a ribbed surface to provide user  
2 feedback.

1 28. The assembly of claim 23 wherein movement of said cover from said closed position  
2 to said open position, and returning said cover to said closed position, causes said protrusion  
3 to slide in said track in one direction in a generally closed loop path.

1 29. The assembly of claim 23 wherein said assembly further comprises:  
2 a support tab located adjacent to said track when said cover is in said open position;  
3 an arm pivotally mounted to said one of said cover or said housing wherein said  
4 protrusion is located on said arm; and  
5 a supplemental arm that coupled to one of said cover or said housing, said  
6 supplemental arm being supported by said support tab when said cover is in said open  
7 position to thereby support said cover when said cover is in said open position.